



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,448	06/23/2003	Gregory A. Holbrook	FIRZ 2 00143	9762

7590 03/09/2006

Patent Counsel
Bridgestone Americas Holding, Inc.
1200 Firestone Parkway
Akron, OH 44317-0001

EXAMINER

KRAMER, DEVON C

ART UNIT PAPER NUMBER

3683

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/601,448	Applicant(s) HOLBROOK ET AL.	
	Examiner Devon C. Kramer	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 1-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claims 24-27 and 29-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shono et al (6298292) in view of Raad et al (5430647).

IN re claims 24, 33, 44 and 46, Shono et al provides a method of performing a leveling action on a vehicle (figure 2) having a height adjustable suspension system and undergoing a vehicle acceleration (106), said method comprising steps of: a) initiating a leveling action (100) adjusting said suspension system toward a pre-determined height condition of the vehicle; b) discontinuing said leveling action prior to said suspension system achieving said pre-determined height condition c) waiting until said vehicle acceleration decreases below a first pre-determined acceleration threshold; and, d) continuing said leveling action adjusting said suspension system toward said pre-determined height condition. (Abstract) Shono teaches a hydraulic suspension system. Shono lacks the teaching of the second threshold value being less than the first threshold value. Please note that applicant is merely modifying the Shono reference to continue the leveling when it is ensured that the vehicle is not going to be encountering excessive acceleration.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have controlled the leveling device of Shono to allow leveling of the vehicle after the vehicle reaches a second pre-determined acceleration value which is less than the first pre-determined acceleration value to prevent prematurely leveling of a vehicle during times when a vehicle is experiencing extreme changes in acceleration, and since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Raad et al teaches a leveling system for an air suspension system.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the method of Shono et al with an air suspension merely to control a vehicle having a compressed air system.

IN re claims 25-26 and 36-38, see element 30. It is inherent that the controller of Shono performs part of the control steps cited in the claims.

In re claim 27, see step 110 of Shono.

In re claims 29-30 and 35, see col. 6 lines 25-29.

In re claim 31, Shono lacks a specific predetermined time, but inherently a predetermined amount of time must pass in order for the controller to initiate the leveling.

In re claim 32, it would have been obvious to one of ordinary skill in the art at the time of the invention to have made the predetermined period of time of Shono et al in view of Raad et al equal to or greater than 1 second merely to prevent unnecessary

Art Unit: 3683

leveling in the event the acceleration is only under the predetermined level for a very small amount of time.

In re claim 34, see the rejection of claim 31 and claim 27 above.

In re claim 39-40, Shono et al determines an acceleration through differentiating the velocity.

In re claims 41-42, see steps 108 and 110.

In re claims 43 and 45, please note that Shono et al differentiates the velocity to calculate the acceleration and therefor there must be some timing device in order to perform the calculation.

3) Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shono et al (6298292) in view of Raad et al (5430647) and further in view of Karnopp (5346242).

In re claim 28, Shono et al in view of Raad et al lacks the teaching of an accelerometer, but teaches obtaining an acceleration value from differentiating the velocity.

Karnopp teaches the interchangeability of find acceleration by an accelerometer or differentiation. (col. 18 lines 4-9)

It would have been obvious to one of ordinary skill in the art at the time of the invention to have substituted the differentiating step of Shono et al as modified by Raad et al with an accelerometer merely to provide a direct signal measuring the acceleration of a vehicle and to cut down on the computers processing.

Response to Arguments

4) Applicant's arguments filed 12/28/05 have been fully considered but they are not persuasive. Applicant has amended the claim to state that leveling is continued when the vehicle's acceleration decreases below a second threshold which is lower than the first threshold. Applicant states that it would not be obvious to modify Shono to perform in this manner, but the examiner disagrees because applicant is merely changing the time when the leveling device is operated after it is shut down.

Conclusion

5) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C. Kramer whose telephone number is 571-272-7118. The examiner can normally be reached on Mon-Fri 8-4.


Art Unit: 3683

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571)272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Devon C Kramer
Primary Examiner
Art Unit 3683

DK


3/5/06